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Canada Tungsten Mining  
Corporation Limited

Annual Report 1976



THE ANNUAL MEETING of the Shareholders of Canada Tungsten Mining Corporation Limited will be held on Thursday, April 28, 1977, at 11:00 o'clock in the forenoon in the Varley Room, Hotel Toronto, Toronto, Ontario.

COVER PHOTOGRAPH, BY MRS. MARY CAIN, TAKEN AT 8:00 p.m. in SEPTEMBER, 1976, SHOWING THE NORTHERN LIGHTS OVER THE TOWNSITE OF TUNGSTEN, N.W.T.

CANADA TUNGSTEN MINING  
CORPORATION LIMITED

Executive Office

303 - 535 Thurlow St., Vancouver, B.C.

Head Office

Suite 600, 365 Bay St., Toronto, Ont.

Branch Office

80 Niobe Street, North Vancouver, B.C.

Officers

J.B. Redpath, Chairman of the Board  
C. Allen Born, President and Chief Executive Officer  
M.K. Coffin, Secretary-Treasurer  
P.M. Cain, General Manager

Directors

John B. Aird, Toronto  
C. Allen Born, Vancouver  
J.M. Richard Corbet, Toronto  
Dr. E.B. Gillanders, Vancouver  
John W. Goth, New York  
J.B. Redpath, Toronto  
H.A. Sawyer, Jr., New York

Transfer Agents  
and Registrars

Canada Permanent Trust Company  
20 Eglinton Avenue West, Toronto, Ont.

Bankers

Canadian Imperial Bank of Commerce  
Vancouver, B.C.

Auditors

Deloitte, Haskins & Sells  
Royal Centre, Vancouver, B.C.



## **Directors' Report to the Shareholders**

Your directors present herewith the Annual Report of your Company, together with the General Manager's Report and audited financial statements for the year ended December 31, 1976.

During the year under review, your Company earned a record net profit of \$6,896,219, or \$1.38 per share, compared with \$886,477, or 17¢ per share, from 1975 operations.

This significant increase in profit resulted from a substantial increase in sales volume as well as higher tungsten prices, coupled with increased production at lower unit costs. The increased production reflected a greater tonnage of ore mined and processed and a higher grade of ore as well as a significant improvement in mill recovery.

### **Tungsten Market**

The past year saw a marked recovery of the Western World tungsten market, especially during the second half, compared with the depressed condition that characterized 1975. Consumption is estimated to have increased about 24% in the United States, 35% in Europe and 37% in Japan. The Metal Bulletin price of tungsten increased steadily during 1976 from a low of \$81 per S.T.U. in January to a high of \$132 in December. The average price in 1976 was \$104 per S.T.U., 25% above the 1975 average.

### **Production**

The mining and milling of 188,934 tons of ore at a grade of 1.55%  $\text{WO}_3$  produced 238,998 S.T.U.'s of  $\text{WO}_3$  compared with 1975 production of 179,032 tons of ore at a grade of 1.28%  $\text{WO}_3$  and 162,892 S.T.U.'s of  $\text{WO}_3$ . Mill recovery was 81.6% compared with 71.1% for the previous year.



The improvement in operating performance during the year was notable. Compared with 1975, tonnage was up 6%,  $WO_3$  grade was up 21%, and mill recovery increased by 15%, resulting in a 47% increase in tungsten concentrate production.

#### **Ore Reserve**

Ore reserve calculations as of December 31, 1976 have been revised to reflect mineable ore reserves rather than geological reserve as was the past practice. This calculation uses 80% of the actual proven geological reserve as mineable reserve.

The drifting and diamond drilling on the western extension of the orebody during 1976 has proven additional tonnage. Mineable ore reserves as of December 31, 1976 were estimated at 4,190,100 tons averaging 1.55%  $WO_3$ . Drifting and diamond drilling on the western extension is continuing during 1977.

#### **Capital Expenditures**

Expenditures during 1976 on underground and surface equipment and facilities amounted to \$1,734,000.

In March, 1977, the Board of Directors approved an expansion program of approximately \$10 Million to expand mining and milling capacity from 500 to 1,000 tons of ore per day at the Tungsten, N.W.T., facility. Construction will commence in June of this year with completion scheduled during the spring of 1979.

#### **Labour Relations**

Contract renewals were negotiated and settled without work stoppage with three units of the United Steelworkers of America, the office and production units at the mine and the North

Vancouver processing plant local. All contracts are two-year labour agreements, expiring during late 1978.

#### **Exploration**

Outside exploration was concentrated in the two permit areas in Quebec acquired during the 1975 exploration season. Certain radio-active anomalies will be tested by diamond drilling during the 1977 summer season.

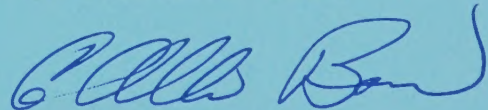
No further work was necessary during 1976 on the Bailey claim group in the Yukon. Your Company holds a 60% interest in the property, which has a possible geological reserve of 500,000 tons grading 0.95%  $WO_3$ .

#### **Executive Office**

During the year the Executive Office of the company was moved from Toronto to Vancouver. The new location has greatly improved co-ordination of operations at the mine.

Two new management appointments have been made. Mr. M.K. Coffin was appointed Secretary-Treasurer of the Company; Mr. Coffin brings 28 years of corporate accounting experience to your Company. Mr. Peter M. Cain, P.Eng., was promoted to General Manager; Mr. Cain is a mining engineer with many years experience in operations, mine evaluation and management.

On behalf of the Board,



C. ALLEN BORN,

President and Chief Executive Officer.

Toronto, Ontario.

March 18, 1977



# BALANCE SHEET AS

(With prior year f

## ASSETS

CURRENT ASSETS:	1976	1975
Cash and short-term deposits .....	\$ 2,769,115	\$ 201,389
Accounts receivable .....	9,367,250	2,842,967
Inventories of concentrates .....	2,125,500	2,175,687
Income taxes recoverable .....	—	336,802
Total current assets .....	14,261,865	5,556,845
PROPERTY, PLANT AND EQUIPMENT — at cost (Note 2)	13,890,503	12,743,036
Less accumulated depreciation and amortization ....	7,893,243	6,924,659
Net property, plant and equipment .....	5,997,260	5,818,377
OTHER ASSETS:		
Inventory of materials and supplies — at cost .....	1,508,366	1,283,031
Deferred preproduction and development costs less amounts amortized (Note 1) .....	3,077,432	3,307,800
Deferred mining expenses .....	—	259,840
Total other assets .....	4,585,798	4,850,671
TOTAL .....	\$24,844,923	\$16,225,893

The accompanying notes are an integral part of the financial statements.

AUDITO

To the Shareholders of  
Canada Tungsten Mining Corporation Limited:

We have examined the balance sheet of Canada Tungsten Mining Corporation Limited as at December 31, 1976 and the statements of income and retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.



# CANADA TUNGSTEN MINING CORPORATION LIMITED

(Incorporated under The Business Corporations Act, Ontario)

**T DECEMBER 31, 1976**

(for comparison)

## LIABILITIES AND SHAREHOLDERS' EQUITY

CURRENT LIABILITIES:	1976	1975
Accounts payable and accrued liabilities .....	\$ 1,851,972	\$ 1,312,776
Income taxes payable .....	1,759,615	—
Total current liabilities .....	3,611,587	1,312,776
DEFERRED INCOME TAXES .....	1,419,000	1,496,000
SHAREHOLDERS' EQUITY:		
Share capital:		
Authorized:		
5,000,000 shares of a par value of \$1 each		
Issued and fully paid:		
4,990,000 shares .....	4,990,000	4,990,000
Less discount .....	1,372,851	1,372,851
Retained earnings .....	3,617,149	3,617,149
Total shareholders' equity .....	16,197,187	9,799,968
TOTAL .....	19,814,336	13,417,117
	\$24,844,923	\$16,225,893

Approved by the Board:

C. ALLEN BORN ..... Director

H.A. SAWYER, JR. .... Director

## REPORT

In our opinion these financial statements present fairly the financial position of the company as at December 31, 1976 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

February 7, 1977  
Vancouver, B.C.

DELOITTE, HASKINS & SELLS  
Chartered Accountants



**CANADA TUNGSTEN MINING  
CORPORATION LIMITED**

**STATEMENT OF INCOME AND RETAINED EARNINGS**

**For the Year Ended December 31, 1976**

(With prior year figures for comparison)

	1976	1975
INCOME FROM OPERATIONS BEFORE THE		
UNDERNOTED (Note 3) .....	\$10,743,623	\$ 3,105,113
INTEREST ON SHORT-TERM DEPOSITS .....	39,401	62,526
	<u>10,783,024</u>	<u>3,167,639</u>
OTHER COSTS AND EXPENSES:		
Depreciation .....	1,123,865	915,625
Amortization of deferred preproduction and development costs .....	230,368	92,318
Exploration .....	289,572	953,219
Total other costs and expenses .....	<u>1,643,805</u>	<u>1,961,162</u>
INCOME BEFORE INCOME TAXES .....	<u>9,139,219</u>	<u>1,206,477</u>
PROVISION FOR INCOME TAXES:		
Current .....	2,320,000	175,000
Deferred (recovery) .....	(77,000)	145,000
Total provision for income taxes .....	<u>2,243,000</u>	<u>320,000</u>
NET INCOME FOR THE YEAR .....	<u>6,896,219</u>	<u>886,477</u>
RETAINED EARNINGS AT BEGINNING OF THE YEAR	<u>9,799,968</u>	<u>8,913,491</u>
	<u>16,696,187</u>	<u>9,799,968</u>
DIVIDENDS .....	499,000	—
RETAINED EARNINGS AT END OF THE YEAR .....	<u>\$16,197,187</u>	<u>\$ 9,799,968</u>
EARNINGS PER SHARE .....	<u>\$1.38</u>	<u>\$0.17</u>

The accompanying notes are an integral part of the financial statements.



# CANADA TUNGSTEN MINING CORPORATION LIMITED

## STATEMENT OF CHANGES IN FINANCIAL POSITION

For the Year Ended December 31, 1976

(With prior year figures for comparison)

FUNDS PROVIDED:	1976	1975
Net income for the year .....	\$ 6,896,219	\$ 886,477
Add net amount of items not involving a flow of funds .....	1,968,316	1,383,768
Total funds provided from operations .....	8,864,535	2,270,245
 FUNDS APPLIED:		
Additions to property, plant and equipment .....	1,733,991	2,159,865
Materials and supplies .....	225,335	300,449
Dividends .....	499,000	—
Total funds applied .....	2,458,326	2,460,314
 INCREASE (DECREASE) IN WORKING CAPITAL		
FOR THE YEAR .....	6,406,209	(190,069)
WORKING CAPITAL AT BEGINNING OF THE YEAR ..	4,244,069	4,434,138
WORKING CAPITAL AT END OF THE YEAR .....	\$10,650,278	\$ 4,244,069

The accompanying notes are an integral part of the financial statements.

## NOTES TO THE FINANCIAL STATEMENTS

For the Year Ended December 31, 1976

### 1. Summary of Significant Accounting Policies:

#### (a) Conversion of U.S. Dollars:

Current assets and liabilities which are receivable or payable in U.S. dollars (principally accounts receivable) have been converted to Canadian dollars at the rate in effect at the end of the year.

#### (b) Inventories of Concentrates:

Inventories of concentrates are valued at the lower of cost or net realizable value. Cost is determined on the moving average basis and does not include depreciation or amortization of deferred preproduction and development costs.

#### (c) Depreciation:

It is the Company's practice to provide for depreciation of plant, buildings, and machinery and equipment at 15% per annum on a straight line basis.

#### (d) Amortization of Deferred Preproduction and Development Costs:

Preproduction and development costs related to the underground ore body are deferred and charged to income over the estimated life of the ore body on the basis of units sold.

#### (e) Exploration:

Exploration expenditures are charged to income as incurred.

#### (f) Deferred Income Taxes:

The balance of deferred income taxes results from claiming preproduction and development costs as deductions from taxable income in the year expended, whereas these costs are being charged to income over the estimated life

of the ore body for accounting purposes and from claiming greater amounts of depreciation for income tax purposes than the amounts recorded for accounting purposes.

### 2. Property, Plant and Equipment:

The major categories of property, plant and equipment are as follows:

	1976	1975
Plant and buildings .....	\$ 6,392,058	\$ 5,687,398
Machinery and equipment ....	7,373,445	6,930,638
Land .....	125,000	125,000
TOTAL .....	\$13,890,503	\$12,743,036

### 3. Sales Disclosure:

Pursuant to Section 173 of The Business Corporations Act, Ontario, an order was obtained from the Ontario Securities Commission permitting the company to omit disclosure of sales in the statement of income for the years ended December 31, 1975 and 1976.

### 4. Remuneration of Directors and Senior Officers:

Remuneration of directors and senior officers, as defined in The Business Corporations Act, Ontario, amounted to \$212,000 for the year ended December 31, 1976 (1975 — \$188,000).

### 5. Anti-Inflation Legislation:

Under anti-inflation legislation enacted by the Government of Canada effective October 14, 1975, the company is not permitted to declare or pay dividends in the twelve-month period ending October 13, 1977 in excess of 18.4¢ per share. The 1976 dividend of 10¢ per share was declared and paid prior to October 13, 1976. Regulations concerning the payment of dividends after October 13, 1977 have not yet been issued by the Government.



## Report of the General Manager

The President and the Board of Directors,  
Canada Tungsten Mining Corporation Limited

Dear Sirs:

The following report briefly covers the 1976 operations of the mine and mill at Tungsten, N.W.T., and the leach plant in North Vancouver, B.C. Both facilities operated continuously during the year.

### Mine

During the year 185,871 tons of ore were mined grading 1.59%  $\text{WO}_3$ . Waste broken totalled 26,424 tons of which 19,472 tons were used for backfill in the open stopes.

The following development work was completed:

	1976 FEET	1975 FEET
Drifting and Crosscutting ...	2,602	1,265
Access Ramps .....	1,237	1,107
Stope Development .....	2,014	1,126
Raising .....	126	1,002
Diamond Drilling .....	4,943	238

The mineable ore reserves as of December 31, 1976, are estimated to be 4,190,000 tons grading 1.55%  $\text{WO}_3$ . The mineable reserve is based on mining 80% of the geological ore reserves. Exploration development and diamond drilling on the west end of the ore zone has added approximately 857,000 tons of ore grading 1.65%  $\text{WO}_3$  to the geological reserves during 1976.

### Mill

The mill treated 188,934 tons of ore grading 1.55%  $\text{WO}_3$ . Total production amounted to 238,998 S.T.U.'s. Overall recovery averaged 81.6%. The concentrator operated at a rate of 523 tons per day with an overall operating efficiency of 97.8%.

The copper circuit was operated periodically to produce 58,500 pounds of concentrate at 17.8% Cu. Metallurgical problems still exist in this circuit and test work is being conducted to raise the concentrate grade.

### Surface

The trailer park was extended to accommodate four mobile homes and sites were prepared on the front street for four double wide trailer homes.

The powerhouse extension was completed and the oil-fired boiler was installed. The waste heat recovery boilers for the generator engines were cleaned and a water treatment unit was installed to filter and soften the boiler makeup water. Major mechanical overhaul work was completed on three generator engines and minor work was done on three other units.

An addition was built onto the school to accommodate a Kindergarten class and an extension was added to the store for storage space. The post office building was repaired and roofing was replaced on ten houses. The new laundry facility was completed and in use at year end.

The new warehouse was erected. A fold-away type building was put up to serve as a parking garage for surface equipment during the winter months.

Two major pieces of mine operating equipment were purchased during the year, a rock bolt jumbo and a D-4 tractor.

Approximately four miles of access road was widened and a total of twelve miles was resurfaced.

### General

Operations at the leach plant were satisfactory with an overall recovery of 97.2%.

Two year contracts with the three USWA locals were signed. The two agreements at Tungsten expire October 31, 1978 and the agreement in North Vancouver expires December 31, 1978.

Consultants have completed an aquatic biological study of the Flat River and the design of the new tailing dams for the future tailing impoundment.

I would like to express my sincere appreciation to all the staff and operating personnel of the Company for their cooperation and excellent performances during the year. In addition, I would like to thank the Directors of The Company for their support.

Respectfully submitted,

Peter M. Cain  
General Manager

March 14, 1977













MINING CORPORATION LIMITED

STATEMENT OF INCOME

For the Three Months Ended March 31, 1976

(with 1975 figures for comparison)

	First Quarter 1976	First Quarter 1975
Income from Operations before write-off .....	\$738,336	\$798,341
Less:		
Depreciation .....	275,555	202,528
Amortization of Pre- Production expense ..	23,019	17,987
Exploration expense .....	23,244	24,425
Provision for Taxes .....	110,300	150,000
	<u>432,118</u>	<u>394,940</u>
Net Income for the Period	<u>\$306,218</u>	<u>\$403,401</u>
Net Income per Share ....	<u>6.1¢</u>	<u>8.1¢</u>

PRODUCTION STATISTICS

For the Three Months Ended March 31, 1976

	1976	1975
Tons Milled .....	44,771	39,467
Grade WO <sub>3</sub> .....	1.51%	1.19%
Grade Cu .....	0.25%	0.10%
Short Ton Units WO <sub>3</sub> Produced .....	50,933	30,071
Pounds Copper Produced .	Nil	Nil
Average Recovery WO <sub>3</sub> ..	75.46%	63.78%
Average Recovery Copper.	Nil	Nil

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MINING CORPORATION LIMITED

See

REVIEW

of the

ANNUAL MEETING

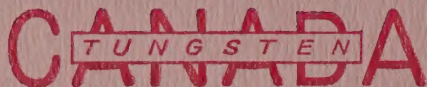
TORONTO, THURSDAY, APRIL 29, 1976

and

INTERIM REPORT

FOR QUARTER ENDED MARCH 31, 1976





## MINING CORPORATION LIMITED

### TO THE SHAREHOLDERS:

Following is a brief review of the recent Annual Meeting:

Sales for the first quarter were down as predicted. However, production for the first three months of 1976 has been excellent. Mill recovery of 75.57% for the first quarter is as planned. The recovery problem with talc encountered in 1975 has not disappeared but has diminished significantly.

Development of the mine now allows grade to be controlled with many benefits to both recovery and overall production.

Tungsten demand gradually weakened during 1975. In the U.S., for example, demand for tungsten decreased more than 30% compared to a good year like 1974. Isolated signs of a business pickup seemed to be evident during early 1976. Considering the sharp drop in demand, the price of tungsten held up remarkably well. The Metal Bulletin price of tungsten averaged \$80.11 per short ton unit in 1974, \$83.33 in 1975 and \$83.53 during the first quarter of 1976. These prices partly reflect the tremendous cost escalation in the mining industry and the reluctance of many producers, including the Chinese, to sell at low prices. They also reflect that excess inventory today is far below that of 1972.

At the end of 1975, the U.S. stockpile contained a total of 116 million pounds of tungsten, with a stockpile objective of 4.2 million pounds. We expect that in the course

of the latest stockpile review the objectives will be increased substantially in the near future.

Capital spending for 1976 has been budgeted at \$1,700,000 with \$300,000 of this total being a carry-over from 1975.

Exploration for 1976 has been planned as a "maintenance" program to maintain the permit properties acquired during the 1975 exploration program.

Also included are results for the first quarter of 1976.

Directors re-elected were: J. B. Aird, C. A. Born (President & Chief Executive Officer), J. M. R. Corbet, E. B. Gillanders, J. W. Goth, J. B. Redpath (Chairman of the Board), and H. A. Sawyer, Jr.

The Company's auditors, Deloitte, Haskins & Sells, Chartered Accountants, were re-appointed.

On behalf of the Board,

C. A. BORN,  
President.

Toronto, Ontario.  
May 12, 1976.